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An optical element for shielding against light

The invention relates to an optical element in the form of an at least partially transparent face comprising transparent areas as well as essentially non-transparent areas.

Modern buildings are often constructed with large glass fronts. This applies in particular to office buildings, where the individual offices often have windows from floor to ceiling. This presents a number of advantages. On the one hand, a number of degrees of freedom are provided with regard to the architectural appearance of the building and, on the other, very light rooms with good views are provided. However, practice has shown that the large glass panels are also associated with drawbacks. Thus, apart from light rooms, the large amount of incoming light also means that the rooms are heavily heated since a considerable part of the incident light will be directly incident sola radiation. In particular on hot summer days or in areas with averagely ele vated temperatures, the heating of rooms can be so powerful that it is necessary to use considerable energy resources to cool the rooms in question. Also, directly incident solar radiation may also cause inconvenience in the form of blinding to persons who are in the vicinity of the glass panels in question.

A number of solutions are known that aim to reduce the heating and/or the inconvenience in the form of blinding from the directly incident solar radiation. One of the most well-known solutions is curtains that can be drawn on the inside of the individual panes. However, they are associated with the drawback that they also eliminate the view from the relevant room, as usually they are more or less non-transparent. Besides, the fact that they are arranged on the inside means that the heat radiation they are supposed to shield agains